

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER POR PATENTS PO Box (430 Alexandra, Virginia 22313-1450 www.opto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/533,015	01/30/2006	Kazuyoshi Yano	3462.1014-000	1671
2005 7590 HAMILTON, BROOK, SMITH & REYNOLDS, P.C. 530 VIRGINIA ROAD			EXAMINER	
			OLSEN, KAJ K	
P.O. BOX 913 CONCORD, M	3 4A 01742-9133		ART UNIT	PAPER NUMBER
			1724	
			MAIL DATE	DELIVERY MODE
			03/23/2011	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

## Application No. Applicant(s) 10/533.015 YANO ET AL. Office Action Summary Examiner Art Unit KAJ K. OLSEN 1724 -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --Period for Reply A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS. WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status 1) Responsive to communication(s) filed on 28 December 2010. 2a) ☐ This action is FINAL. 2b) This action is non-final. 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims Claim(s) 1-13 is/are pending in the application. 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration. Claim(s) \_\_\_\_\_ is/are allowed. 6) Claim(s) 1-13 is/are rejected. Claim(s) \_\_\_\_\_ is/are objected to. 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement. Application Papers 9) The specification is objected to by the Examiner. 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d). 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some \* c) None of: Certified copies of the priority documents have been received.

Attachment(s)

1) Notice of References Cited (PTO-892) 4) Interview Summary (PTO-413) Paper No(s)/Mail Date. Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) Notice of Informal Patent Application 3) Information Disclosure Statement(s) (PTO/SB/08)

application from the International Bureau (PCT Rule 17.2(a)). \* See the attached detailed Office action for a list of the certified copies not received.

Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage

Paper No(s)/Mail Date 6) Other: U.S. Patent and Trademark Office

Application/Control Number: 10/533,015 Page 2

Art Unit: 1724

#### DETAILED ACTION

### Claim Rejections - 35 USC § 112

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode

contemplated by the inventor of carrying out his invention.

2. Claims 1-13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with

the written description requirement. The claim(s) contains subject matter which was not

described in the specification in such a way as to reasonably convey to one skilled in the relevant

art that the inventor(s), at the time the application was filed, had possession of the claimed

invention.

3. Claims 1, 5 and 10 have been amended to call for connection medium to be delivered

through one or more channels separately connected to the intermediate cavity. Claims 6 and 8  $\,$ 

have been amended to specify that there are one or more channels connected to the intermediate

cavity for delivering connection medium to the intermediate cavity. The examiner cannot find

any support for the use of channels connected to the intermediate cavity. Applicant alleges

support for these new limitations can be found at p. 8, ll. 21-23, p. 10, ll. 10-18 and fig. 2. The

examiner disagrees as none of these passages states anything about channels connected to the

intermediate cavity. All the citation at p. 8 states is that a hole for the groove can be provided

and p. 10 states that there can be multiple grooves that include the intermediate cavity.

However, a hole is not the same thing as one or more channels as is now being claimed. Figure 2

only appears to show a channel for delivering fluid to the first cavity and does not appear to

provide support for the use of a channel for delivering the connection medium to the

Art Unit: 1724

intermediate cavity. Moreover, the examiner cannot find where the specification ever states that this connection medium is explicitly recited as being separately delivered to the intermediate cavity. The specification appears to only set forth that the connection medium is introduced at some point into the intermediate cavity without any reference to where this connection medium is coming from (a separate channel?, from either the first or second cavities?). A vague reference to the provision of a hole on an unspecified groove does not provide support for the connection medium being explicitly delivered via that hole.

# Claim Rejections - 35 USC § 102 and 103

4. Although the examiner does not believe that support exists for the new limitations of the claims, the examiner will still tentatively withdraw the use of Brown and Lee in view of Brown as Brown is drawn to the use of connection medium that comes from the first or second cavities, in contrast to the amended claims.

### Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KAJ K. OLSEN whose telephone number is (571)272-1344. The examiner can normally be reached on M-F 6:00-2:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Keith D. Hendricks can be reached on 571-272-1401. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/533,015 Page 4

Art Unit: 1724

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kaj K Olsen/ Primary Examiner, Art Unit 17243

March 22, 2011